

## ABSTRACT

An improved spa control system is disclosed. The invention describes a spa control system which calculates the time required to heat the water in the spa system to a desired temperature. From that information, the heating rate of the spa system can be  
5 determined, and the heating element of the spa system can be activated at the proper time to raise the temperature of the water to a selected temperature by a desired time. The spa system also monitors information which might show errors in the operation of the spa system such as a blockage in the flow of water over the heating element in the spa system.